

A Celebration of the New Steel -- the Pittsburgh Regional Technology Showcase



THE EVENT

The Pittsburgh Regional Technology Showcase will highlight the steel industry's continued progress in achieving its vision of the future through industry/government partnerships. The Showcase will demonstrate the benefit of these partnerships through plant tours, plenary sessions, exhibits, and technical presentations. Moreover, the Showcase will demonstrate the Department of Energy's many ways of helping industry to improve efficiency and productivity through all facets of manufacturing and plant operations.

WHO WILL ATTEND?

Over 500 participants, including leading members of the steel industry, their equipment suppliers, technology and industry decision makers from the Pittsburgh region and the Nation - who are seeking ways of becoming more competitive internationally - and representatives of the other eight Department of Energy Industries of the Future (Agriculture, Aluminum, Chemicals, Forest Products, Glass, Metalcasting, Mining, and Petroleum Refining) are expected to attend the Pittsburgh Regional Technology Showcase.

FOR INFORMATION ON HOW TO REGISTER:

Call toll free, 1-877-OIT-7967.



WHEN: MAY 4 & 5, 2000

**WHERE: HOLIDAY INN — PITTSBURGH INTERNATIONAL AIRPORT
CORAOPOLIS, PENNSYLVANIA**

**PURPOSE: TO SUPPORT, PROMOTE, AND HIGHLIGHT THE USE OF ADVANCED
TECHNOLOGIES IN STEEL MANUFACTURING IN THE PITTSBURGH
REGION AND THE NATION**

**PARTNERS: THE U.S. DEPARTMENT OF ENERGY, THE COMMONWEALTH OF
PENNSYLVANIA, THE AMERICAN IRON AND STEEL INSTITUTE,
AND THE STEEL MANUFACTURERS ASSOCIATION**

The Pittsburgh Regional Technology Showcase is a public event highlighting a year-long intensive effort by the U.S. Department of Energy's Steel Industry of the Future Program to support and promote the use of advanced technologies by steel companies in the Pittsburgh region. The U.S. Department of Energy has already begun this effort by field testing advanced technologies in U.S. Steel's Edgar Thomson Works and Weirton Steel (in nearby West Virginia).

Open to the public from the Pittsburgh region and the U.S., this two-day intensive event will showcase new technologies that are reinventing the industry and making steel the *New Steel*. Held in America's cradle of the steel industry, the Showcase is designed to support the steel industry suppliers, manufacturers, and universities in the Pittsburgh region by publicly celebrating its national importance and promoting its use of advanced technologies.

Plenary sessions, exhibits, technical presentations, and guided tours of local plants (Edgar Thomson and Weirton) will focus on advanced technologies for producing high quality steel efficiently and cleanly. Themes for the technical sessions include the Commonwealth of Pennsylvania Steel Technology Initiatives, Plant Technologies & Energy Use Analysis, Research & Development, Federal Government Funding & Assistance Opportunities, and Best Practices for Higher Productivity.

In addition, a Congressional Field Hearing, where local members of Congress and industry CEOs will discuss the future of the steel industry and its importance to the state and national economy, is scheduled on Friday (May 5).

Because the development of the next generation of steel workers is of particular concern to the industry, a special Student Track promoting careers in the steel industry is included on the agenda for Friday (May 5). The Student Track will feature special presentations and a plant tour for approximately 100 local community college and university students who will attend that day.

Showcase Description

Goals: Technology Showcases illustrate how industry and the Nation can achieve energy, environmental, and competitive benefits through collaborative industry/government partnerships. Technology Showcases illustrate the positive results of research performed through these partnerships as well as energy efficiency opportunities in plant operations through the Department of Energy's Best Practices Program.

Agenda at a Glance

Five Focused Showcase Tracks Scheduled for May 4, 2000

- 1) Commonwealth of Pennsylvania Steel Technology Initiatives
- 2) Plant Technologies & Energy Use Analysis
- 3) Research & Development
- 4) Federal Government Funding & Assistance Opportunities
- 5) Best Practices for Higher Productivity

Two Focused Showcase Tracks Scheduled for May 5, 2000

- 1) Congressional Field Hearing
- 2) Student Program

Plant Tours -- Highlighted Technologies

Weirton Plant Technologies:

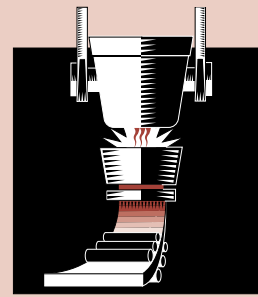
Double-Ended Laser Basic Oxygen Furnace Optical Sensor
Galvanneal Temperature Measurement Sensor
Infrared-Based Preheating of Strip
Nickel Aluminide Radiant Tubes
Nickel Aluminide Seal Rolls

U.S. Steel's Edgar Thomson Plant Technologies:

Laser-Based Blast Furnace Burden Temperature Measurement Sensor
Basic Oxygen Furnace Contour Scannerless Sensor
Top Blown Lance Optical Sensor at the Ladle Metallurgy Station
Single-Ended Laser Basic Oxygen Furnace Optical Sensor

Showcase Topics

Advanced Control of Operations in the Blast Furnace
Advanced Materials
American Iron and Steel Institute - Technology Roadmap Research Program 2000
Burns Harbor Showcase Technologies
Development of the Automated Steel Cleanliness Analysis Tool
Development and Application of Laser Assisted Arc Welding to Steel
Electric Motor Systems / Compressed Air
Enhanced Inclusion Removal from Steel in Tundish
Improving Refractory Service Life and Recycling in Electric Arc Furnaces
Lessons Learned from Industrial Energy Audits
Pennsylvania's Academia: Research & Development Opportunities in Advanced Steel Manufacturing
Pennsylvania Department of Environmental Protection: Partnerships and Programs Supporting the Steel Industry
Pennsylvania's Economic Incentives: What's Available to the Steel Industry
Pennsylvania's Technology Development Programs: Success Stories and Opportunities
Processing Electric Arc Furnace Dust into Saleable Chemical Products
Process to Recover Acid and Metal Salts from Pickling Liquors
Power Quality and Reliability for Steel Plants
Reasonably Achievable Energy Use in the Steel Industry
Reducing the Variability of High Strength Low Alloy Sheet Steels
Sensors & Controls for Steel Productivity
SMA Student Fellowship Opportunities
Steam / Combined Heat & Power
The Streamlined Solicitation Process for the New Steel Solicitations from the U.S. Department of Energy
Theoretical Minimum Energy Use in Steel Production
U.S. Steel's Edgar Thomson Plant – Tour Technologies
Using Value Chain Economics to Increase Steel Productivity
Weirton Steel – Tour Technologies
Working with the U.S. Department of Energy's National Laboratories
Working with the U.S. Department of Energy's National Industrial Competitiveness through Energy, Environment, and Economics and Inventions & Innovation Programs



VIP GUESTS

CONFIRMED:

Congressman William J. Coyne
Congressman Mike Doyle
Andrew F. Sharkey, CEO, American Iron and Steel Institute
Curtis H. Barnette, CEO, Bethlehem Steel
William W. Beible, Jr., President and COO, Koppel Steel Corporation
Paul Wilhelm, CEO, U.S. Steel
Richard K. Riederer, CEO, Weirton Steel
Tim McNulty, Executive Deputy Secretary, Pennsylvania Department of Community and Economic Development
Dan Reicher, U.S. Department of Energy Assistant Secretary
Denise Swink, U.S. Department of Energy Deputy Assistant Secretary for the Office of Industrial Technologies

INVITED:

Bill Richardson, Secretary of Energy
Tom Ridge, Governor of the Commonwealth of Pennsylvania
Thomas Murphy, Mayor of Pittsburgh
James M. Seif, Secretary of the Pennsylvania Department of Environmental Protection
James Roddey, Chief Executive, County of Allegheny
Heads of regional universities

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Scott Richlen
Phone: (202) 586-2078
Fax: (202) 586-3237
scott.richlen@ee.doe.gov
<http://www.oit.doe.gov/steel>

Peter Salmon-Cox
Phone: (202) 586-2380
Fax: (202) 586-9234
peter.salmon-cox@ee.doe.gov

Office of Industrial Technologies
Energy Efficiency
and Renewable Energy
U.S. Department of Energy
Washington, D.C. 20585



March 2000